**Physical Science Chemical & Physical Changes (Ch. 7 Outline)**

***AS YOU READ, RESPOND TO THE FOLLOWING:***

*Vocabulary*: **Define in your own words**

matter-

atom-

substance-

element-

compound-

mixture-

dissolve-

mass-

density-

solubility-

Respond to the questions/prompts below:

Define the terms *homogenous* and *heterogenous* mixture. Explain what makes the two mixture types different. Also, give an example of EACH type of mixture. (4 pts)

How do atoms of different elements differ? (2pts)

How can you classify matter? Explain. (2pts)

Give example of a size-dependent physical property and a size-independent physical property. (1 pt)

How are chemical properties different than physical properties? Also, give an example of two types of chemical properties and explain why they are chemical properties instead of physical. (4 pts)

What are the five main ways to separate a mixture? Simply state them. (1 pt)

State the law of conservation of mass. Explain why this is an important law for helping scientists understand the natural world. (2 pts)

How can a change in energy affect the state of matter? What happens to the state of matter as more/less energy is added/removed from a substance? Explain. (3 pts)

State the three steps for balancing a chemical equation. (3 pts)

What are the three factors that can affect the rate of a chemical reaction? Explain WHY they affect the rate of the chemical reaction. (6 pts)

***ABOUT THE READING:***

Write three things that you learned about the Chemical/Physical Changes*:*

***Make sure to write a full sentence.***

*Example: I learned that the concentration of a substance refers to the amount of a substance in a unit of volume.*

*1.*

*2.*

*3.*